(I) Purpose and Need

The purpose of this project is to reduce traffic operational problems at a one block offset of State Route 32 in the City of Orland. These problems are caused by peak hour congestion, lack of coordination between traffic signals, and an insufficient turning radius for tractor/trailer trucks to maneuver this part of SR 32.

Route 32 is generally a two-lane rural Federal Aid Primary Highway and is an identified terminal access route for STAA trucks (The Surface Transportation Assistance Act of 1982 allows large trucks to operate on interstates and certain primary routes). Route 32, between Interstate 5 and Route 99, provides major access for trucks to the rapidly growing Chico Urban Area. In addition, Route 32 is a significant recreational highway, providing access to Black Butte Reservoir and to Interstate 5 on the west side of Orland, as well as to Lassen National Forest, Lassen National Park, and Lake Almanor areas at the route's east end.

Route 32 traverses the City of Orland through the downtown business district. Within the project limits, PM 0.3 to 0.6, the existing route passes through a one block offset through two right angle turns. This is because from the completion of State Route 32 in 1928 until February 1960, State Route 32's westerly terminus was its intersection with Sixth Street, formerly State Route 99W. In February 1960, the California Highway Commission adopted an additional section of State Route 32, extending it north along old State Route 99W, then west along Swift Street to Interstate 5.

Large trucks have difficulty making the offset turns without encroaching into opposing traffic lanes. The turning trucks frequently mount curbs at the corners and swing out into the lanes of oncoming traffic. Vehicles waiting in left-turn lanes sometimes have to back up to allow a truck to complete the turn. Some truck drivers avoid the turns on Route 32 by using Eighth Street rather than Sixth Street. Trucks waiting to turn left from Sixth Street to Swift or Walker Streets sometimes cause backups into previous intersections. Although the railroad tracks are only about 150 feet east of the intersection of Sixth and Walker, the signals at the intersection are not coordinated with the railroad signals.

The City and Glenn County have identified the truck turning conflicts, backups into adjacent intersections, and the lack of coordination between the traffic signals and the railroad crossing guard as sources of frequent operational deficiencies.

(II) Project Description

This project proposes to correct operational deficiencies on State Route 32 in the City of Orland, from PM 0.3 to 0.6, by either improving the existing alignment or realigning the route in one of two ways.

Alternatives

Three alternatives are being considered in addition to the no build. Two of the alternatives are realignments that eliminate the two 90-degree turns. The other alternative improves the existing alignment to accommodate truck turns and reduces congestion.

No Build (See Exhibit D)

This alternative does not address the operational deficiencies identified by the city and county.

Alternative A1 (See Exhibit A)

Improve the existing alignment of State Route 32 within the project limits. The intersections of Swift and Sixth Street and Sixth and Walker Street, as well as the segment of Sixth Street in between would be widened. Traffic signals would be installed at the intersection of Swift and Sixth Street where there are currently stop signs. Both intersections would be synchronized for a progressive movement of traffic through this block.

The left-turn volumes on Sixth Street in both directions can be accommodated by restriping this highway segment for a block-length, left-turn lane and a through lane in each direction. This design would provide more than 300 feet (91 meters) of left-turn lane storage. This four-lane section would also have adequate storage for the peak hour percentage of trucks. Both intersections would also be widened to accommodate turns of STAA trucks. This widening would require additional right of way from properties at the intersections of Swift Street/Sixth Street, and Sixth Street/Walker Street. The resulting four-lane section on Sixth Street may require additional widening of up to 4 feet (1.2 m) on either side for 12 ft (3.6 m) lanes and 8 ft (2.4 m) shoulders. Such widening would likely not require additional right of way.

Also, facilities would be provided to preempt the signals at Sixth and Walker Street when trains are using the crossing on Walker Street. These improvements would reduce peak hour congestion and prevent backups into other intersections.

Alternative B (See Exhibit B)

Alternative B realigns State Route 32 by projecting the tangent from the Interstate 5 interchange to the intersection of Sixth and Walker. This alignment would bisect the project area with a straight diagonal line. Route 32 would connect to the intersection of 6th and Walker at a 45-degree angle. Swift Street would be truncated in a bulb before it reaches the Swift and 8th Street intersection. Traffic on Walker Street west of Sixth Street would be prevented from entering the intersection of 6th and Walker, or going north on 7th Street, but it would be able to turn south on 7th Street. The existing signal at Sixth and Walker would be improved to current standards. Facilities would be provided to preempt the signal when trains use the crossing.

Alternative C (See Exhibit C)

Alternative C is also a major realignment designed to bring State Route 32 directly into the intersection of Sixth and Walker Streets. Rather than using a straight line across the existing block of homes and businesses, this alternative uses a pair of curves to bring the highway into a perpendicular intersection with Sixth Street. This alternative also upgrades the existing traffic signal at Sixth and Walker Streets, and provides facilities to preempt the signal when trains use the crossing. The alley between Swift and Walker Streets would be closed off to prevent access into the newly created signalized intersection on 8th Street between Swift and Walker.